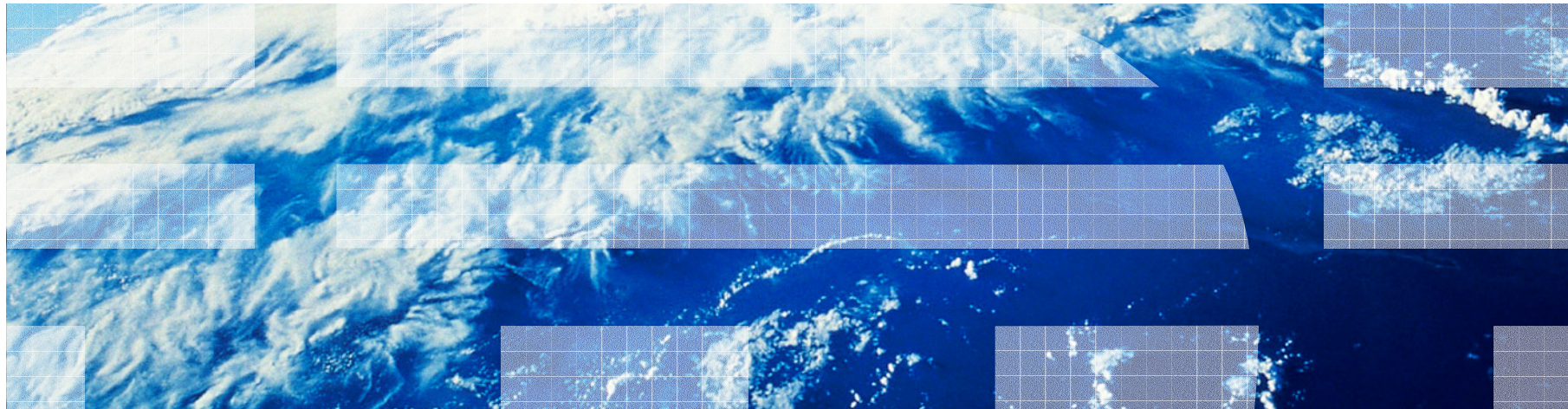


# IBM Rational Developer for System z in Action

Ingo Franzki & Wilhelm Mild, IBM



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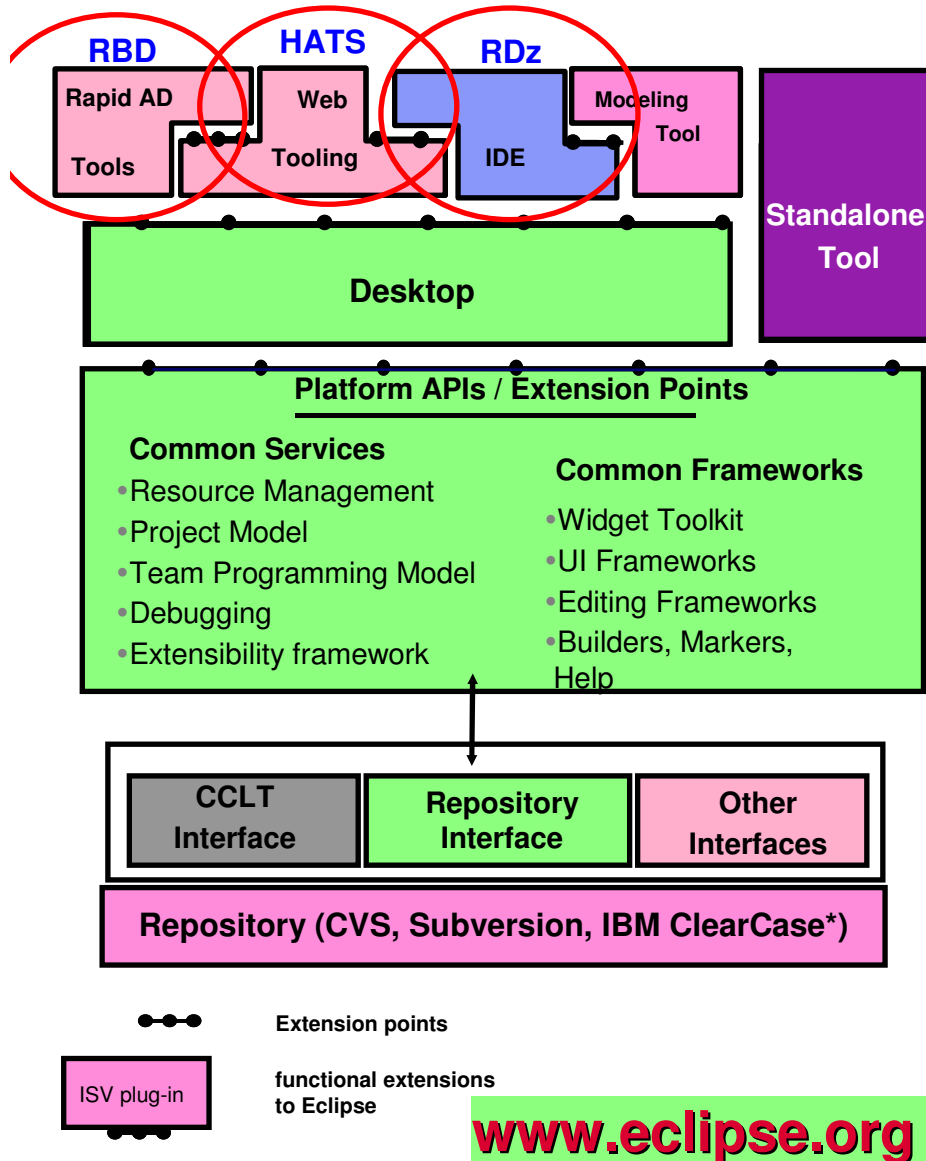
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# Eclipse based Development Environments for z/VSE

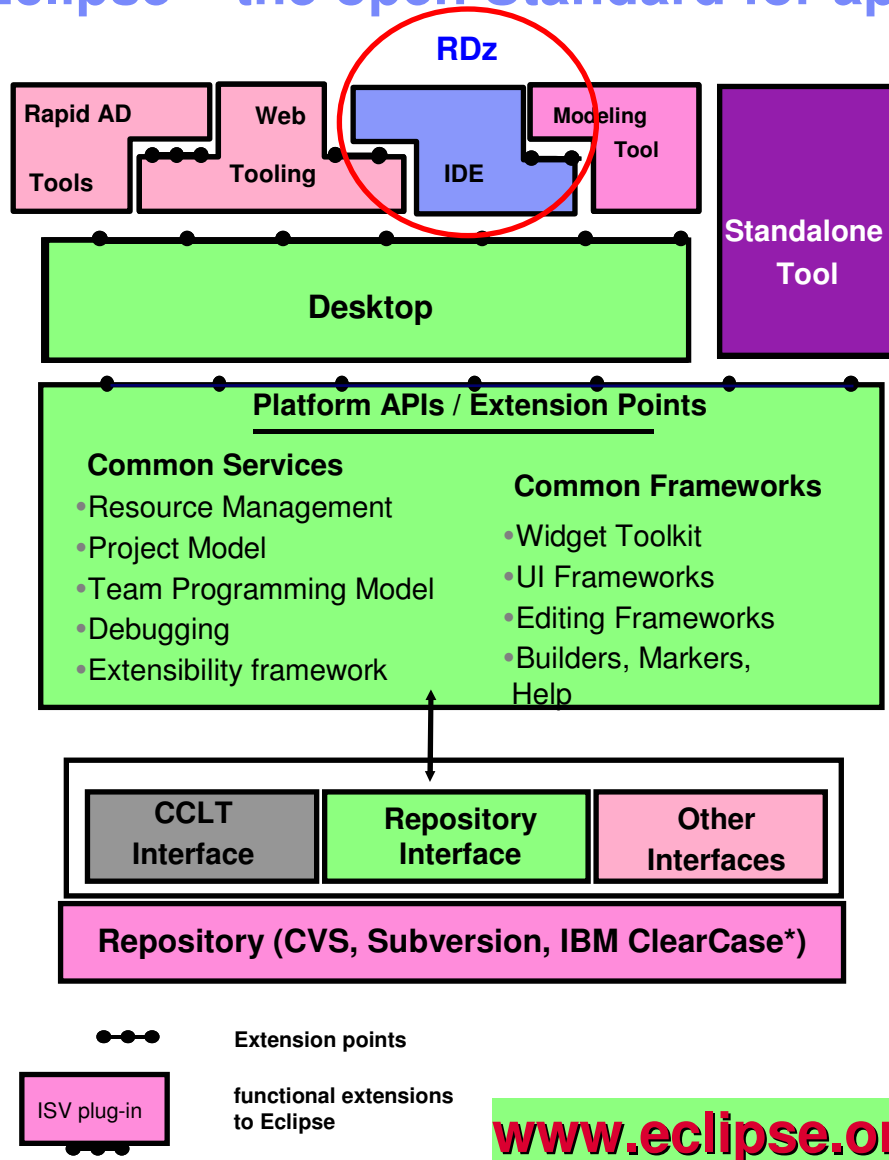
Eclipse – the open Standard for application development



What is Eclipse about:

- Open source development framework
  - with modern Editors
  - syntax help & check
  - semantic check
- Centralized source code maintenance
  - entire source code in central Repository
  - cross platform project administration
- Versioning software interface
  - CVS, Subversion, or IBM ClearCase
  - automatic Workgroup-control
- Open for ISVs development Plug-Ins
  - 1) Integrated Development Environment (IDE)
    - Rational Developer for System z (RDz)
    - for Java, COBOL, PL/I, ASM,C
  - 2) IBM HATS Development Plug-In
    - develop new front-ends to 3270 applications
  - 3) IBM EGL development for z/VSE
    - Rational Business Developer (RBD)
    - EGL Plug-In for z/VSE
    - follow-on to Visual Age Generator

# Eclipse – the open Standard for application development

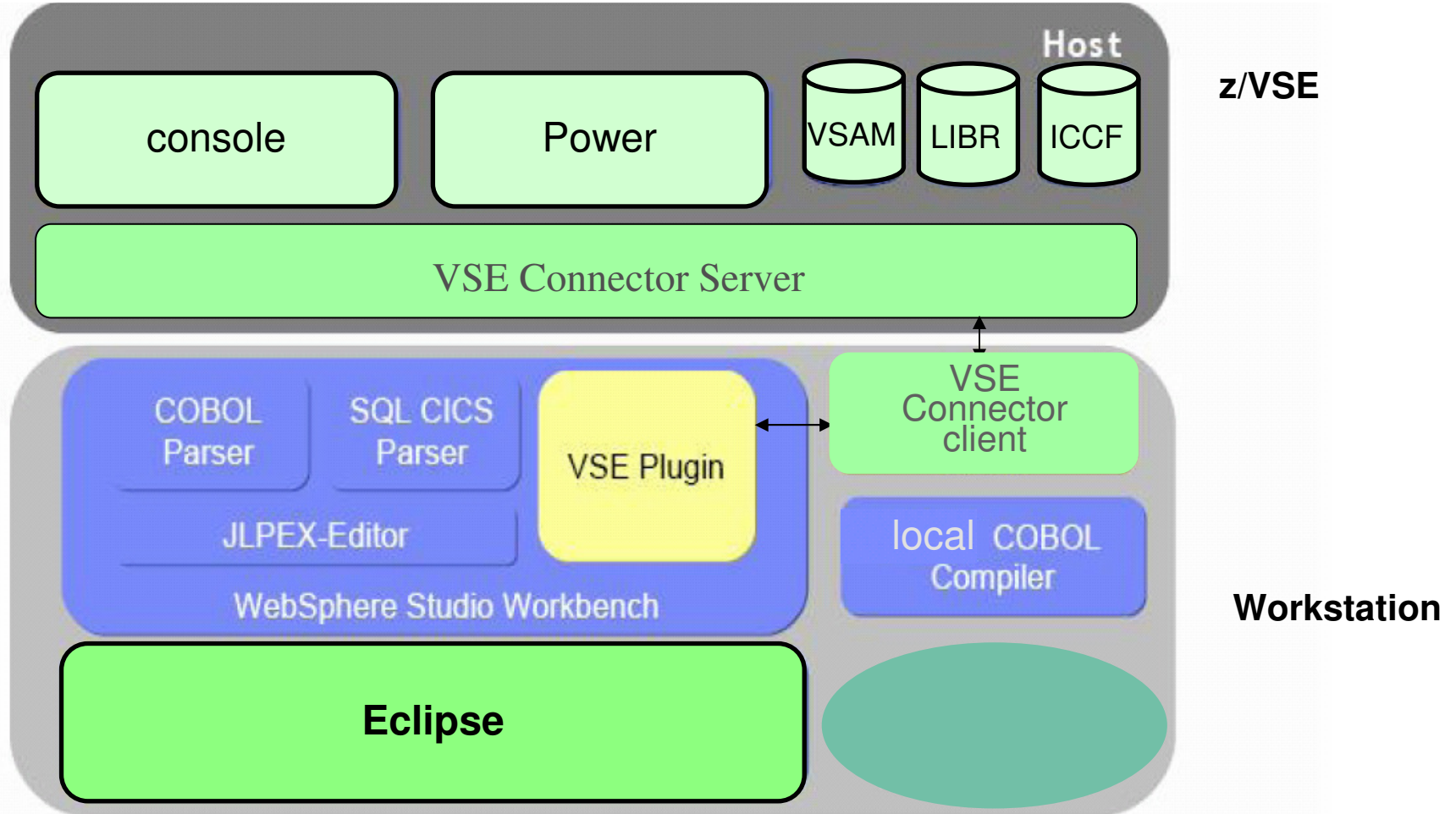


[www.eclipse.org](http://www.eclipse.org)

## What is Eclipse about:

- Open source development framework
  - with modern Editors
  - syntax help & check
  - semantic check
- Centralized source code maintenance
  - entire source code in central Repository
  - cross platform project administration
- Versioning software interface
  - CVS, Subversion, or IBM ClearCase
  - automatic Workgroup-control
    - i.e. development groups, system group
- **Open for ISVs development Plug-Ins**
  - **Integrated Development Environments (IDE)**
  - **for System z (RDz)**
  - **for Java, COBOL, PL/I, ASM,C**
  - Application analysis and optimization
    - **RTW – Rational Trasformation Workbench**
    - **Analyze applications with graphical correlations**
  - IBM HATS Development Plug-In
    - develop new front-ends to 3270 appls.
  - **IBM EGL development for z/VSE (RBD)**
    - follow-on to Visual Age Generator

# IBM Rational Developer for System z (RDz) with z/VSE Development Plug-in





# IBM Rational Developer (RDz) in z/VSE perspective

The screenshot shows the IBM Rational Developer (RDz) interface in z/VSE perspective. The main window displays the source code for a program named PRINTAPP.cbl. The code is organized into sections: Identification Division, Data Division, Working-Storage Section, Linkage Section, and Procedure Division. The code includes comments and instructions for data processing, such as moving data from one field to another and displaying the results.

Annotations highlight key features of the interface:

- 1. Perspective:** The overall view of the development environment.
- 2. View:** The right-hand pane showing the project structure and system components.
- 3. Projects:** The left-hand pane showing the project hierarchy.
- 4. Editor:** The central pane where the source code is edited.
- 5. Outline View:** The bottom-left pane showing a detailed outline of the current program's structure.
- 6. VSE Console:** The bottom-right pane showing the output of the VSE Mainframe, including a memory map (MAP) and a list of system resources.

The VSE Console output shows a memory map (MAP) with columns for ADDRESS (AR), SPACE, AREA, V-SIZE, GETVIS, V-ADDR, and UNUSED NAME. The data is as follows:

AR	SPACE	AREA	V-SIZE	GETVIS	V-ADDR	UNUSED NAME
AR 0015	S	SUP	716K		0	\$\$\$SUPI
AR 0015	S	SVA-24	1888K	1748K	E3000	768K
AR 0015	0	EG V	1280K	4864K	500000	45056K
AR 0015	1	F1 V	1024K	4096K	500000	OK FOMSTART
AR 0015	2	F2 V	2048K	49152K	500000	OK CICSICCF
AR 0015	3	F3 V	600K	14760K	500000	OK VTAMSTR
AR 0015	4	F4 V	2048K	18432K	500000	OK
AR 0015	5	F5 V	768K	256K	500000	OK
AR 0015	6	F6 V	256K	256K	500000	OK
AR 0015	7	F7 V	1024K	19456K	500000	OK TCPIP00
AR 0015	8	F8 V	2048K	49152K	500000	OK
AR 0015	9	F9 V	256K	256K	500000	OK
AR 0015	A	FA V	256K	256K	500000	OK
AR 0015	B	FB V	256K	256K	500000	OK
AR 0015	S	SVA-31	7588K	6748K	3700000	OK SECSERV

# IBM Rational Developer (RDz) in z/VSE perspective

1. Perspective

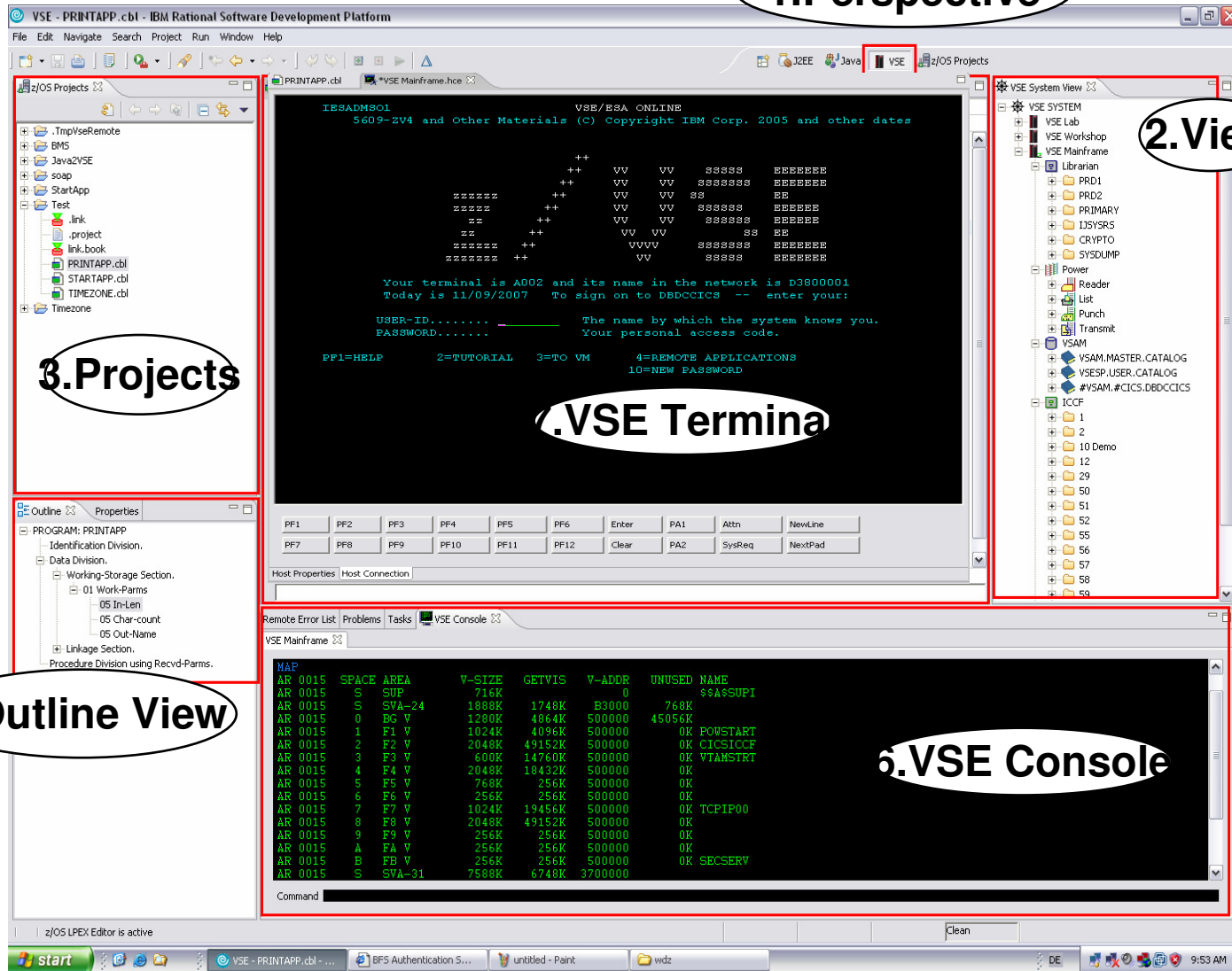
2. View

3. Projects

.VSE Terminal

5. Outline View

6. VSE Console



## Conclusion: Development for all platforms with one tool set

- A modern tool set to support z/VSE development and maintenance
  - modern editor for enhanced productivity
  - tools to analyze and optimize existent applications and workflow
  
- Common framework for enterprise development
  - standard for all developers
  - example: z/VSE with COBOL, Linux on System z with Java
  - easy skill transfer
  
- Open source framework
  - commonly thought in schools and universities
  - smooth introduction of new developers to the mainframe



# Eclipse – an open Integrated Development Environment for the enterprise

